



## ABSTRACT

5       The present invention provides therapeutic compositions and methods for  
treating disease conditions in humans associated with an antigen specific immune  
response by the human to an antigen such as a protein antigen (i.e. allergy and  
autoimmune diseases). Therapeutic compositions of the invention are reproducible  
preparations which are suitable for human therapy. Compositions of the invention  
10      comprise at least one isolated peptide having a defined sequence of amino acid residues  
and the composition is capable of down regulating an antigen specific immune response  
to an offending antigen in a population of humans subject to the antigen specific  
immune response. Compositions and methods of the invention may be used to treat  
sensitivity to protein allergens in humans and may also be used to treat autoimmune  
15      disease such as rheumatoid arthritis, diabetes, myasthenia gravis, Grave's disease, Good  
Pasture's syndrome, thyroiditis and multiple sclerosis.